



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/587,756

06/25/2007

Masato Miyake

690121.409USPC

9903

500 7590 09/29/2010  
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC  
701 FIFTH AVE  
SUITE 5400  
SEATTLE, WA 98104

EXAMINER

ZEMAN, MARY K

ART UNIT

PAPER NUMBER

1631

MAIL DATE

DELIVERY MODE

09/29/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,756	<b>Applicant(s)</b> MIYAKE ET AL.	
	<b>Examiner</b> Mary K. Zeman	<b>Art Unit</b> 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) 5-7,45-56,67-82 and 84-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8-44,57-66,77 and 83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-86 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/1/08 and 11/20/09</u> .                                     | 6) <input type="checkbox"/> Other: ____.                          |

Art Unit: 1631

### **DETAILED ACTION**

Claims 1-44, 57-66, 77 and 83 are pending in this application. All other claims have been withdrawn from consideration.

Applicant's election without traverse of Group I, claims 1-44, 57-66, 77 and 83, and the species of a biological index and biological data in the reply filed on 7/21/10 is acknowledged.

Applicant has misidentified claims which are drawn to the elected species. The following claims are not directed to the elected species of a biological index and biological data: claims 5-7. Claims 1-4, 8-44, 57-66, 77 and 83 are under examination.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

The IDS forms filed 8/1/08 and 11/20/09 have each been entered and considered.

#### ***Drawings***

The drawings filed with the application are suitable to the examiner.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 8-44, 57-66, 77, 83 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1631

In claim 1, the metes and bounds of the claim are unclear. In step A, from where is the time series obtained? How is the original index derived? On what basis? In step B, It is unclear what a Characteristic behavior is intended to encompass- any aspect of the index? In step C, how much is a portion? How does the portion describe the event and event timing? Limitations from the specification cannot be read into the claims.

The multiple dependent claims recite a variety of systems, indices, and a multitude of mathematical "characteristic behaviors" with no link as to how they are to be analyzed together to obtain an event descriptor. The program and storage claims fail to remedy these deficiencies.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 1-4, 8-44, 57-66, 77 and 83 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

**According to the *Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos* (75 FR 43922 at 43927 (27 July 2010)), factors that weigh against the eligibility of a process include no recitation of a machine or transformation, involvement of the machine is merely tangentially related to the performance of the steps, and the claim is a mere statement of a general concept.**

**Claims 1-4, 8-44, 57-66, 77 and 83 are directed to methods of generate a data aspect which describes a system, and behavior at a point in time. These methods do not transform (either explicitly or inherently) any particular physical article such as nucleotides or biological samples; they merely operate on data and indices, which are abstract mathematical constructs. None of the recited steps are expressly or inherently tied to a computer. The involvement of the computer may thus be only tangential to the performance of the method; for example, index data, and the characteristic behavior data may be retrieved from the computer, but the recited algorithmic steps to produce the descriptor can be performed without its involvement. Thus, the implication that the methods are “computer implemented” does not “give life, meaning, and vitality to the claim” (see MPEP 2111.02). Furthermore, the claims merely recite a general concept of generating a type of data by analyzing data, which is not a practical application of a well-defined algorithm. Thus, the methods claimed are wholly directed to an abstract idea, and therefore are directed to non-statutory subject matter.**

**The program and storage media for carrying out the claimed method of claim 1, are intangible, and merely comprise software elements.** These include physical but transitory forms of signal transmission such as radio broadcasts, electrical signals, and light pulses through fiber-optic cable that convey information encoded in manner disclosed and claimed by applicant, are not directed to statutory subject matter under 35 U.S.C. §101, since claimed signal is not “process,” in that “process” requires some kind of action, and claims at issue, although potentially product-by-process claims, do not cover act or series of acts, since claimed signal is not “machine,” in that transitory signal made of electrical or electromagnetic variances, although physical and real, is not made of “parts” or “devices” in any mechanical sense, and thus does not possess concrete structure, since “manufacture,” for purposes of Section 101, is properly defined as tangible article or commodity resulting from manufacture, and transient electrical or electromagnetic transmission does not fit that definition, and since claimed

Art Unit: 1631

signal is not “composition of matter,” in that signal comprising fluctuation in electric potential or electromagnetic fields is not “chemical union,” gas, fluid, powder, or solid.

In re Nuijten, 84 USPQ2d 1495 (Fed. Cir. 2007)

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-44, 57-66, 77, 83 are rejected under 35 U.S.C. 102(b) as being anticipated by KOARA (2003).

Koara et al (2003, identified in ISR/210) discloses methods of providing an event descriptor, where in a biological system (hand motion changes) indices of behavior and time are used to produce that descriptor. Figures 1-4 describe how the system is analyzed to obtain a biological index, and how behaviors associated with that system change over time. The one dimensional event code sequence appears to be equivalent to the descriptors being claimed. The algorithms on pages 470-471 are related to the various elements of change over time. Figures 7 and 10 are an overview of a system that would comprise a program and storage media for carrying out the methods. Figures 9 and 10 and the elements of Table 1-2 are samples of the descriptors obtained.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (571) 272 0723

Art Unit: 1631

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjie Moran can be reached on (571) 272 0720. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Mary K Zeman/

Primary Examiner, Art Unit 1631